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## SYSTEM AND METHOD FOR ACCESSING REGISTERS OF PHY DEVICE IN NETWORK

## ABSTRACT OF THE DISCLOSURE

A system and method for accessing registers of a PHY device in a network including an extended protocol software layer between the protocol and application layers, on the one hand, and the MAC driver, on the other hand. The extended protocol layer generates the PHY device register read and write commands and embeds them within standardized Ethernet data packets. The extended PHY device is adapted to distinguish these register read and write command packets from normal data packets and intercept and parse them to retrieve the commands. Likewise, the extended PHY device embeds the read and write acknowledgments in standardized Ethernet data packets that the extended protocol layer, in turn, can distinguish from normal Ethernet data packets and intercept and parse them to retrieve the acknowledgments.

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